A **Modified birthday paradox** There are n people in a room. They start calling out their birthdays in (some) order. If anybody else's birthday matches then person says STOP and the game stops, else the person who called out his/her birthday leaves the room. What is the probability that at least k people leave the room given that the n people were chosen randomly to start with.

B Consider a drunkard who starts at the bottom of a flight of stairs (step 0) and at each step either takes one step up or skips a step and takes two steps up. He does either with equal probability. Calculate the probability p_k that he doesn't skip step k.